

## BCAT Publications and Presentations

- “Spinodal Decomposition in a Model Colloid-Polymer Mixture in Microgravity,” A.E. Bailey, W.C.K. Poon, R.J. Christianson, A.B. Scholfield, U. Gasser, V. Prasad, S. Manley, P.N. Segre, L. Cipelletti, W.V. Meyer, M.P. Doherty, S. Sankaran, A.L. Jankovsky, W.L. Shiley, J.P. Bowen, J.C. Eggers, C. Kurta, T. Lorik, Jr., P.N. Pusey, and D.A. Weitz, *in press, accepted Physical Review Letters*.
- "Novel defect structures in nematic liquid crystal shells" A. Fernández-Nieves, V. Vitelli, A. S. Utada, D. R. Link, M. Márquez, D. R. Nelson, and D. A. Weitz, *Physical Review Letters* 99 157801 (2007).
- "Colloidal Assembly Route for Responsive Colloidosomes with Tunable Permeability" Jin-Woong Kim, Alberto Fernández-Nieves, Nily Dan, Andrew S. Utada, Manuel Marquez, and David A. Weitz, *Nanoletters* 7 2876-2880 (2007).
- "Target-locking acquisition with real-time confocal (TARC) microscopy" Peter J. Lu, Peter A. Sims, Hidekazu Oki, James B. Macarthur, and David A. Weitz, *Optics Express* 15 8702 (2007).
- "Short- and long-range correlated motion observed in colloidal glasses and liquids" Eric R Weeks, John C Crocker and D A Weitz, *Journal of Physics: Condensed Matter* 19 205131 (2007).
- "Topological Changes in Bipolar Nematic Droplets under Flow" A. Fernández-Nieves, D. R. Link, M. Márquez, and D. A. Weitz, *Physical Review Letters* 98 087801 (2007).
- "Contribution of Slow Clusters to the Bulk Elasticity Near the Colloidal Glass Transition" Jacinta C. Conrad, Param P. Dhillon, Eric R. Weeks, David R. Reichman, and David A. Weitz, *Physical Review Letters* 97 265701 (2006).
- "Microscopic Structure and Elasticity of Weakly Aggregated Colloidal Gels" A. D. Dinsmore, V. Prasad, I.Y. Wong, and D. A. Weitz, *Physical Review Letters* 96 185502 (2006).
- "Polarization dependent Bragg diffraction and electro-optic switching of three-dimensional assemblies of nematic liquid crystal droplets" A. Fernández-Nieves, D. R. Link, and D. A. Weitz, *Applied Physics Letters* 88 121911 (2006).
- "Visualizing dislocation nucleation by indenting colloidal crystals" Peter Schall, Itai Cohen, David A. Weitz & Frans Spaepen, *Nature* 440 319 (2006).
- “Microgravity Phase Separation near the Critical Point in Attractive Colloids,” P. J. Lu, D. A. Weitz, M. C. Foale, M. Fincke, L. N. Chiao, W. V. Meyer, J. C. Owens, M. I. Hoffmann, R. J. Sicker, R. Rogers, C. A. Frey, A. S. Krauss and G. P. Funk, M. A. Havenhill, S. M. Anzalone, H. Yee, 45th AIAA Aerospace Sciences Meeting and Exhibit. Reno, NV. January 8 - 11, 2007; AIAA-2007-1152.

- “Fluids of Clusters in Attractive Colloids,” P. J. Lu, J. C. Conrad, H. M. Wyss, A. B. Schofield and D. A. Weitz, Phys. Rev. Lett. 96, 028306 (2006).